



**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
COOKEVILLE ENVIRONMENTAL FIELD OFFICE**

DIVISION OF WATER POLLUTION CONTROL
1221 SOUTH WILLOW AVENUE
COOKEVILLE, TN 38506

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June 3, 2010

Mr. Curtis Adams, City Manager
City of Crossville
99 Municipal Ave.
Crossville, TN 38555

CERTIFIED MAIL

Return Receipt Requested

Receipt # 91 7108 2133 3937 2532 3978

**Re: Compliance Evaluation Inspection
Crossville Holiday Hills Water Treatment Plant
NPDES # TN0060941
Receiving Water: Obed River, Cumberland County, TN**

Dear Mr. Adams:

On May 18, 2010, personnel from the Division of Water Pollution Control (WPC) conducted a Compliance Evaluation Inspection at the Crossville Holiday Hills Water Treatment Plant (WTP). The purpose of the inspection was to evaluate compliance with the general NPDES permit for WTP filter backwash and sedimentation basin discharge and to determine the reliability of data submitted on Monthly Operation Reports (MOR) and Discharge Monitoring Reports (DMR). The discharge is to the Obed River.

Permit and Records

The Crossville Holiday Hills WTP is operating under a general NPDES permit that became effective on October 27, 2004 and expired on September 27, 2009. A completed Notice of Intent (NOI) was submitted prior to permit expiration to maintain coverage under the expired general permit until a new general permit is issued. Issuance of the new general permit is forthcoming.

The permit requires that samples of filter backwash water be analyzed for required parameters once per month. These analyses are being performed as required with records of the analyses being maintained at the facility. The records were found to be consistent with data submitted on MORs and DMRs.

Facility Review

Filter backwash water is discharged to a sedimentation basin prior to discharge to the Obed River below the Lake Holiday impoundment. The water in the sediment basin was very clear and had no noticeable odor. A thermodyne polymer is used to reduce turbidity. Sludge from the clarifiers is pumped to the wastewater treatment plant via a sewer connection. The facility and grounds were clean and well-maintained.

Laboratory Review

The laboratory and associated equipment and instruments were well-maintained and organized. Some records are being maintained at the Crossville Meadow Park WTP. Equipment calibration logs are being maintained at the facility. A portion of the laboratory tests are being performed at the wastewater treatment plant (total suspended solids and settleable solids). Chlorine and pH tests are being performed at the WTP due to sample holding time requirements. It was noted that one of the pH buffer solutions did not have an expiration date on the label (see recommendation below). Sampling for aluminum is required by the permit due to the presence of aluminum in the thermodyne polymer. Sampling for iron is being conducted at the Holiday Hills WTP, but is not required by the permit.

Recommendations

- Contact the supplier of pH buffer solutions to the facility to confirm the expiration date of the buffer with no expiration date given on the label. This is to provide assurance that pH monitoring at the facility is accurate.
- Review method used in the aluminum analysis to ensure consistency with the approved EPA method in 40 CFR 136. Given the difficulty in conducting the analysis correctly, it is recommended that samples also be tested for aluminum by an independent laboratory using the approved method for comparison with results being obtained at the water plant.

We extend our thanks to the staff at the Crossville Holiday Hills WTP for their time and courtesy during the inspection. If you have any questions, you may reach me by phone at (931) 432-7642 or toll free at (888) 891-8332. I can also be reached by e-mail at *Martin.Smith@tn.gov*.

Sincerely,



Martin Smith
Division of Water Pollution Control
Cookeville Environmental Field Office

CC: Mr. Patrick Parker, WPC Nashville Central Office, Enforcement & Compliance Mgr (*via e-mail*)
Mr. Rob Howard, WPC Cookeville EFO, Program Manager (*via e-mail*)
Mr. Johnny Walker, DWS Cookeville EFO, Program Manager (*via e-mail*)
WPC EFO File (Cumberland)

Enclosure: EPA 3560 Form